August 22, 1947

Dr. Joshua Lederberg Osborne Botanical Laboratories Yale University New Haven, Connecticut

Dear Dr. Lederberg:

The fact that I have not answered your letter of June 18 sooner is not an indication that I do not appreciate your interest in the problem. Industrial bacteriology, particularly with a company that is interested primarily in killing bacteria with chlorine, does not allow a great deal of time for this sort of thing. I hope you received a sample of 2-Cl-PAB as requested and that you find the quantity sufficient for some experiments. If not let me know and I will try to make more available.

I appreciate the fact that I am not a Geneticist and that I probably did not consider these results as thoroughly as I should have from a genetical standpoint. It certainly seems reasonable that resistance to drugs of this type could be the result of mutations and selection. The one point that puzzles me to some extent and again you must remember that I know nothing about genetics is that the extent of the resistance appears to be related to the concentration of the drug in which they grew when the changes occurred. Regarding the development of organisms on the solid media containing the drug it is, of course, not reasonable to assume that the total inoculum makes a few divisions before growth is inhibited. I believe that this was found to be true by some workers in some of the earlier work on sulfonamides.

I should be very much interested in hearing from you regarding your results with 2-Cl-PAB. Also, would you please send a reprint of your paper recently published in the Journal of Bacteriology with Dr. Tatum.

Sincerely yours,

Frede B. Strandslow

FREDE B. STRANDSKOV Research Department